# City of Santa Barbara Building & Safety Division 2007 California Building Code Residential Plan Review Checklist

Community Development 630 Garden Street 805-564-5485

**Instructions**; Please review your plans for the following items. This is not a complete list of code requirements, but are the more common items missed or that have been changed by the new codes.

### **GENERAL:**

- 1) 2007 CA Building Code, 2007 CA Plumbing Code, 2007 CA Mechanical Code, 2007 CA Electrical Code.
- 2) Plan signed by Registered Design Professional (RDP).
- 3) Scope of Work completely described on the permit application and cover sheet of the plans.

### **PLOT PLAN:**

- 4) Complete parcel size and dimensions.
- 5) Setbacks, side yards, easements, etc.
- 6) Other buildings or structures.
- 7) Grading, fills and/or drainage.
- 8) Flood Zone if applicable.

### FLOOR PLAN:

- 9) 8% of natural light and 4% of ventilation per 2007 CBC Section 1205.
- 10) Escape or rescue windows shall have a minimum net clear openable area of 5.7 square feet (Exception grade-floor openings may be 5 square feet) per 2007CBC Section 1026.
- 11)Interior spaces intended for human occupancy shall be provided with active or passive spaceheating systems capable of maintaining a min. indoor temperature of 68 degrees F at a point 3 feet above the floor. 2007CBC Section 1204.
- 12) Skylights per 2007 CBC Section 2405.
- 13) Glazing in hazardous locations per 2007 CBC Section 2406.3.
- 14)Occupiable spaces, habitable space and corridors shall have a ceiling height of not less than 7' 6". Bathrooms, toilet rooms, kitchens, storage rooms and laundry rooms may have a ceiling height of not less than 7 feet. 2007 CBC Section 1208.2.
- 15) Habitable spaces, other than kitchens, shall not be less than 7 feet in any plan dimension. Kitchens shall have a clear passageway of not less than 3 feet between counter fronts and appliances or counter fronts and walls per 2007 CBC Section 1208.1.

- 16)GFCI type outlets required in bathrooms, kitchen countertops, private garages and exterior receptacles per 2007 CEC Section 210.8.
- 17) Electric service requires minimum 100 amp panel with circuits and disconnects permanently labeled per 2007 CEC Section 230.79 & 230.70. 10. Convenience outlets shall be located and spaced per 2007 CEC 210.52. 11 .Arc-fault circuit interrupters (AFCI) required at all branch circuits supplying outlets in bedrooms per 2007 CEC Section 210.12.
- 18) Water heaters installed in bedrooms and bathrooms shall comply with 2007 CPC Section 505.
- 19) Garage fire wall separation per 2007 CBC Section 406.1.4.
- 20) Openings from a private garage directly into a room used for sleeping purposes shall not be
- 21) permitted per 2007 CBC Section 406.1.4.
- 22) Smoke detectors per 2007 CBC Section 907.2.10.
- 23) Fuel burning equipment shall be installed per 2007 CPC Section 304.
- 24) Water closet clearances per 2007 CPC Section 407.6. (Chapt 11A if applicable)
- 25) Shower compartment minimum 1024 square inches and capable of encompassing a 30 incheincircle per 2007 CPC 41 1.7.

# **CONVENTIONAL CONSTRUCTION:**

- 26) Rafter tie connection per 2007 CBC Table 2308.10.4.1.
- 27)Braced wall panels start at not more than 8 feet from each end of a braced wall line (SDC D and E). Braced wall panels must be in line or offset from each other by not more than 4 feet. Braced wall line spacing shall not exceed 25 feet on center in both the longitudinal and transverse directions per 2007 CBC Section 2308.9.3 & 2308.12.
- 28)A California licensed architect or registered engineer must prepare a lateral analysis for the areas of the structure that do not comply with conventional light framing bracing as prescribed by 2007 CBC Section 2308. Structural calculations and plan sheets depicting structurally designed elements must bear the RDP's (Registered Design Professional's) 'wet' signature and stamp with registration number and date.
- 29) Balloon framed wall or tall stud calcs per 2007 CBC Table 2308.9.1.
- 30) Anchor bolts spaced not more than 4 feet on center per 2007 CBC Section 2308.3.3.
- 31) Complete foundation plans per 2007 CBC Chapter 1805.
- 32)Complete elevation drawings and wall construction details, complete load path and shear transfer.
- 33) Fireplace construction details and calculations as required.
- 34) Header sizes per 2007 Table 2308:9.5.
- 35) Size, height and spacing of stud per 2007 CBC Table 2308.9.1.
- 36) Check setbacks from ascending or descending slopes per 2007 CBC Section 1805.3.
- 37) When soil properties are not known Site Class D shall be used per 2007 CBC Section 1613.5.2. Site Class definitions are in Table 1613.5.2.
- 38) Footings shall be 12" minimum below undisturbed ground surface per 2007 CBC Section 1805.2. No more 18" and 24 minimum depths.

- 39) Ground shall be sloped 5% away from foundations for a minimum of 10' per 2007 CBC Section 1803.3.
- 40) Anchor bolt plate washers shall be 3" x 3" x .229" in SDC D and E per 2007 CBC Section 2308.12.8. Plate washers may have a slot 3/16" larger than the bolt and 1/4" long if a standard cut washer is provided between the plate washer and nut.
- 41)An engineered lateral design is required for irregular portions of structures. Irregularities are described in 2308.12.6.
- 42)Conventional construction is limited to one story in SDC D and E. Except detached one and two family dwellings may be 2 stories in SDC D&E per 2007 CBC Section 2308.1 1 and 2308.12.
- 43) Cripple walls with stude exceeding 14" are considered a story for the purposes of applying braced wall requirements per 2007 CBC Section 2308.2, 2308.9.4.1 and 2308.12.4.
- 44)Professional design is required when bearing wall floor-to-floor height exceeds 10' per 2007 CBC Section 2308.2.
- 45)Braced wall lines must be supported by continuous foundations per 2007 CBC Section 2308.3.4. Exception: Structures with a maximum plan dimension of 50' may be supported with continuous foundations at the exterior walls only.
- 46)Openings in floor and roof diaphragms are restricted to not more than 50% of the distance between braced wall lines or an area not more than 25% of the area between orthogonal pairs of braced wall lines per 2007 CBC Section 2308.12.6 #6.
- 47) Trusses or rafters not allowed to exceed 40' between points of vertical support per 2007 CBC Section 2308.2 #5.
- 48) Professional design is required when combined roof and ceiling dead loads exceed 15 psf per 2007 CBC Section 2308.2 #3.

# **STRUCTRUAL -ENGINEERING:**

- 49) Correct Live Loads per 2007 CBC Table 1607.1.
- 50) Correct 3-second gust wind speed. (85 mph per 2007 CBC Figure 1609A).
- 51) Specified method for wind design: Simplified, Analytical, Wind Tunnel.
- 52) Simplified Wind Load Procedure -must calculate wind loads acting on the main wind force resisting system as well a; components and cladding based on effective wind area.
- 53) Wind exposure categories, surface roughness categories, importance factors, directionality factors.
- 54) Correct Seismic Design Category (SDC) Permissible structural systems, limitations on height and irregularity, permitted lateral force procedure, and required level of strength and seismic detailing. SDC ranges from A through F and is dependent on ground motion, soil characteristics and occupancy category. Most structures in Santa Barbara will be in SDC E.
- 55) Redundancy factor (ASCE 12.3.4).
- 56) Allowable foundation pressure and lateral sliding resistance per Table 1804.2. Allowable foundation pressure for class 5 soils is 1500 psf.
- 57)3000 psi compressive strength concrete required for structures assigned to SDC D, E (exception: light-framed construction, 2 stories or less in height may use 2500 psi concrete).

- 58) Steel requirements based on Reference Standard "Specification for Structural Steel Buildings" AISC 360-05.
- 59)2-2x members or a single 3x framing member for shear wall framing members receiving edge nailing from abutting panels with shear values over 350 plf provided the (2-2x members shall be fastened together in accordance with the AF&PA NDS to transfer the design shear value between the framing members per 2007 CBC Section 2307.1.1, Table 2306.4.1 note i.
- 60) Provide a Special Inspection program per Chapter 17.
- 61)Retaining walls designed for a safety factor of 1.5 against lateral sliding and designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift per 2007 CBC Section 1806.

### **HIGH FIRE HAZARD -CHAPTER 7A:**

- 62) Roof covering, valleys and gutters per 2007 CBC Section 704A.1.
- 63) Attic ventilation, eave and cornice vents and eave protection per 2007 CBC Section 704A.2.
- 64) Exterior wall protection and openings per 2007 CBC Section 704A.3.
- 65) Decking, floors and underfloor protection per 2007 CBC Section 704A.4.
- 66) Ancillary building per 2007 CBC Section 704A.5.

## **MISCELLANEOUS ITEMS:**

- 67) Stairway details -landings, rise, run, head clearance, handrails per 2007 CBC Section 1009.
- 68) Guards shall form a protective barrier not less than 42 inches in height per 2007 CBC Section 1013.2.
- 69) Brick or stone veneer per 2007 CBC Section 1405.
- 70) Exterior plaster weep screeds per 2007 CBC Section 2512.1.2.
- 71)Roof pitch for roof covering per 2007 CBC Chapter 15.
- 72)36 inch halls and stairways per 2007 CBC Section 101 7.2.
- 73) Underfloor access and ventilation per 2007 CBC Section 1209.1.
- 74) Attic access and ventilation per 2007 CBC Section 1209.